ALTO SHAAM®

Banquet Carts

Electric

1000-BQ2/96

1000-BQ2/128

Models:

1000-BQ2/96
1000-BQ2/128
1000-BQ2/192

1000-BQ2/192

- **INSTALLATION**
- **OPERATION**
- **MAINTENANCE**

HALO HEAT®

24•7 Your Service Hotline 1-800-558-8744

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PHONE: 262.251.3800 • 800.558.8744 USA/CANADA FAX: 262.251.7067 • 800.329.8744 U.S.A. ONLY
www.alto-shaam.com

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DELIVERY

This Alto-Shaam appliance has been thoroughly tested and inspected to insure only the highest quality unit is provided. Upon receipt, check for any possible shipping damage and report it at once to the delivering carrier. ***See Transportation Damage and Claims section located in this manual.***

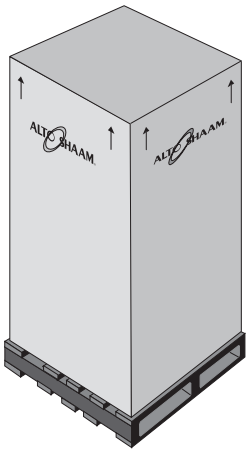
This appliance, complete with unattached items and accessories, may have been delivered in one or more packages. Check to ensure that all standard items and options have been received with each model as ordered.

Save all the information and instructions packed with the appliance. Complete and return the warranty card to the factory as soon as possible to assure prompt service in the event of a warranty parts and labor claim.

This manual must be read and understood by all people using or installing the equipment model. Contact the Alto-Shaam service department if you have any questions concerning installation, operation, or maintenance.

NOTE: All claims for warranty must include the full model number and serial number of the unit.

UNPACKING



1. Carefully remove the appliance from the carton or crate.

   NOTE: Do not discard the carton and other packaging material until you have inspected the unit for hidden damage and tested it for proper operation.

2. Read all instructions in this manual carefully before initiating the installation of this appliance.

   DO NOT DISCARD THIS MANUAL.
   This manual is considered to be part of the appliance and is to be provided to the owner or manager of the business or to the person responsible for training operators. ***Additional manuals are available from the Alto-Shaam service department.***

3. Remove all protective plastic film, packaging materials, and accessories from the appliance before connecting electrical power. Store any accessories in a convenient place for future use.

SAFETY PROCEDURES AND PRECAUTIONS

Knowledge of proper procedures is essential to the safe operation of electrically and/or gas energized equipment. In accordance with generally accepted product safety labeling guidelines for potential hazards, the following signal words and symbols may be used throughout this manual.

DANGER

Used to indicate the presence of a hazard that WILL cause severe personal injury, death, or substantial property damage if the warning included with this symbol is ignored.

WARNING

Used to indicate the presence of a hazard that CAN cause personal injury, possible death, or major property damage if the warning included with this symbol is ignored.

CAUTION

Used to indicate the presence of a hazard that can or will cause minor or moderate personal injury or property damage if the warning included with this symbol is ignored.

CAUTION

Used to indicate the presence of a hazard that can or will cause minor personal injury, property damage, or a potential unsafe practice if the warning included with this symbol is ignored.

NOTE: Used to notify personnel of installation, operation, or maintenance information that is important but not hazard related.

1. This appliance is intended to cook, hold or process foods for the purpose of human consumption. No other use for this appliance is authorized or recommended.
2. This appliance is intended for use in commercial establishments where all operators are familiar with the purpose, limitations, and associated hazards of this appliance. Operating instructions and warnings must be read and understood by all operators and users.
3. Any troubleshooting guides, component views, and parts lists included in this manual are for general reference only and are intended for use by qualified technical personnel.
4. This manual should be considered a permanent part of this appliance. This manual and all supplied instructions, diagrams, schematics, parts lists, notices, and labels must remain with the appliance if the item is sold or moved to another location.

NOTE

For equipment delivered for use in any location regulated by the following directive:

DO NOT DISPOSE OF ELECTRICAL OR ELECTRONIC EQUIPMENT WITH OTHER MUNICIPAL WASTE.

INSTALLATION

SITE INSTALLATION

This appliance, complete with unattached items and accessories, may be delivered in one or more packages, Check to insure that all the following items have been received as standard with each unit:

Item	BQ2/96	BQ2/128	BQ2/192
Shelves	4	4	8
Shelf Clips	4	4	8
Shelf Slides	8	8	16

This appliance is designed for the purpose of maintaining hot foot at a temperature for safe consumption. It must be used on a level surface in a location that will permit the the banquet cart to function for its intended purpose and allow adequate access for proper cleaning and maintenance.

The unit must not be installed in any area where it may be affected by steam, grease, dripping water, high temperatures, or any other severely adverse conditions.

DANGER

IMPROPER INSTALLATION, ALTERATION, ADJUSTMENT, SERVICE, OR MAINTENANCE COULD RESULT IN SEVERE INJURY, DEATH OR CAUSE PROPERTY DAMAGE.

READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

CAUTION

TO PREVENT PERSONAL INJURY, USE CAUTION WHEN MOVING OR LEVELING THIS APPLIANCE.

CLEARANCE REQUIREMENTS

Full perimeter bumper accommodates all clearance requirements.

WEIGHT • 1000-BQ2/96

NET	392 lb (178 kg)
SHIP	450 lb (204 kg)
CARTON	77" x 44" x 35"
DIMENSIONS: (H x W x D)	(1956mm x 1118mm x 889mm)

WEIGHT • 1000-BQ2/128

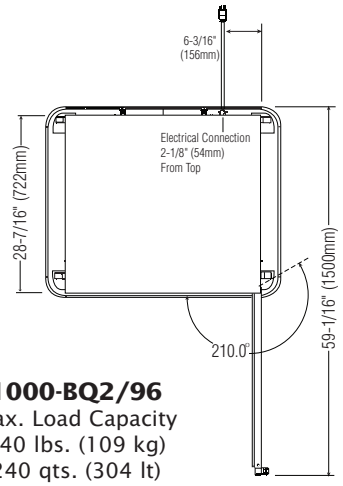
NET	454 lb (206 kg)
SHIP	520 lb (236 kg)
CARTON	77" x 52" x 35"
DIMENSIONS: (H x W x D)	(1956mm x 1321mm x 889mm)

WEIGHT • 1000-BQ2/192

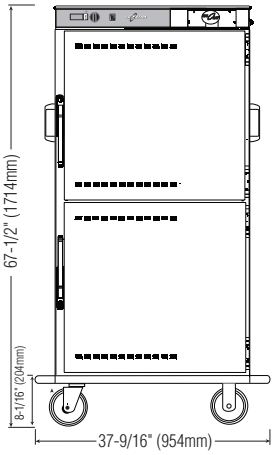
NET	653 lb (296 kg)
SHIP	760 lb (345 kg)
CARTON	77" x 74" x 35"
DIMENSIONS: (H x W x D)	(1956mm x 1880mm x 889mm)

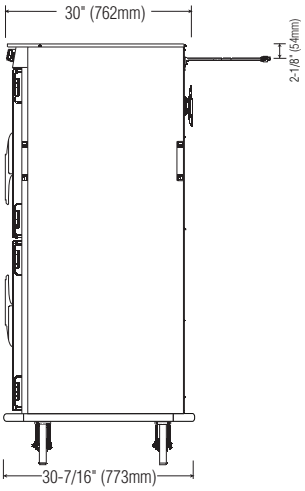
INSTALLATION

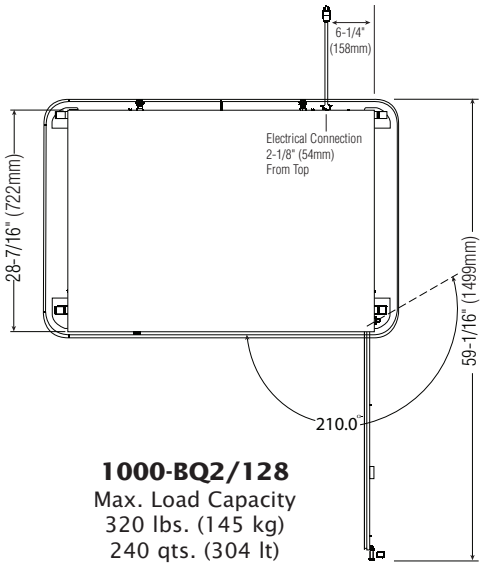
OUTSIDE DIMENSIONS



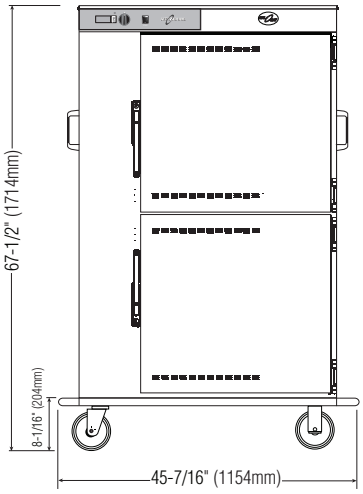
1000-BQ2/96
Max. Load Capacity
240 lbs. (109 kg)
240 qts. (304 lt)

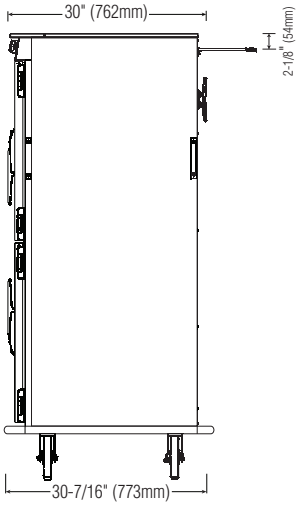


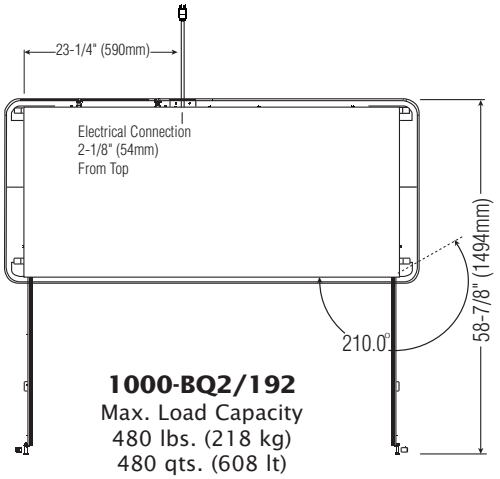




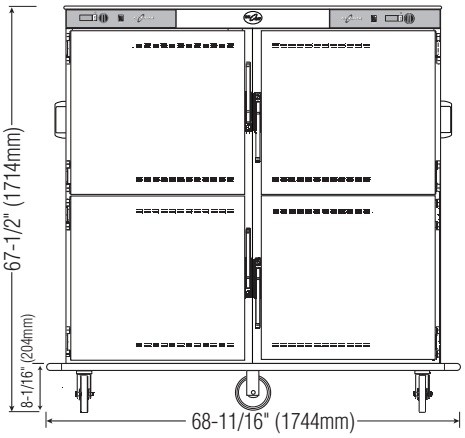
1000-BQ2/128
Max. Load Capacity
320 lbs. (145 kg)
240 qts. (304 lt)

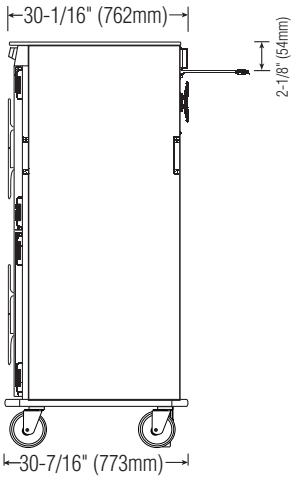






1000-BQ2/192
Max. Load Capacity
480 lbs. (218 kg)
480 qts. (608 lt)





Options and Accessories Plate Carriers, Chrome Plated (EACH HOLDS FOUR (4) PREPLATED MEALS)	**Model 1000-BQ2/96 Capacity**	**Model 1000-BQ2/128 Capacity**	**Model 1000-BQ2/192 Capacity**
Uncovered "P" Carriers . . . . . .DC-2868 Plate Diameter: Max. 10" (254mm) Min. 7-3/4" (197mm) Vertical rung spacing: 2-5/8" (67mm)	24 carriers 96 Preplated Meals	32 carriers 128 preplated meals	48 carriers 192 preplated meals
Covered "C" Carriers . . . . . .DC-2869 Plate Diameter: Max. 9-3/4" (248mm) Min. 7-3/4" (197mm) Vertical clearance between top and bottom carrier: 11-5/8" (295mm)	24 carriers 96 Preplated Meals	32 carriers 128 preplated meals	48 carriers 192 preplated meals
Uncovered "EP" Carriers . . . . . .DC-23580 Plate Diameter: Max. 12-1/2" (318mm) Min. 9-1/2" (241mm) Vertical rung spacing: 2-5/8" (67mm)	16 carriers 64 Preplated Meals	24 carriers 96 preplated meals	32 carriers 128 preplated meals
Covered "EC" Carriers . . . . . .DC-23676 Plate Diameter: Max. 12-1/2" (318mm) Min. 9-1/2" (241mm) Vertical clearance between top and bottom carrier: 11-5/8" (295mm)	16 carriers 64 Preplated Meals	24 carriers 96 preplated meals	32 carrriers 128 preplated meals
Shelf & Shelf Supports (for each extra shelf) . . . . . .1061/11533 Wire Shelf, Chrome Plated	SH-2835	SH-22727	SH-2835

INSTALLATION

ELECTRICAL

⚠ DANGER

ENSURE POWER SOURCE MATCHES VOLTAGE STAMPED ON APPLIANCE NAMEPLATE.

⚠ DANGER

ELECTRICAL CONNECTIONS MUST BE MADE BY A QUALIFIED SERVICE TECHNICIAN IN ACCORDANCE WITH APPLICABLE ELECTRICAL CODES.

DANGER

To avoid electrical shock, this appliance MUST be adequately grounded in accordance with local electrical codes or, in the absence of local codes, with the current edition of the National Electrical Code ANSI/NFPA No. 70. In Canada, all electrical connections are to be made in according with CSA C22.1, Canadian Electrical Code Part 1 or local codes.

1. An identification tag is permanently mounted on the cabinet.

2. Plug cabinet into a properly grounded receptacle ONLY, positioning the unit so the power supply cord is easily accessible in case of an emergency.

3. If necessary, a proper receptacle or outlet configuration as required for this unit, must be installed by a licensed electrician in accordance with applicable, local electrical codes.

NOTE:

230V units:

To prevent an electrical shock hazard between the appliance and other appliances or metal parts in close vicinity, an equalization-bonding stud is provided. An equalization bonding lead must be connected to this stud and the other appliances / metal parts to provide sufficient protection against potential difference. The terminal is marked with the following symbol. ⏚

The appliance must be connected to an electrical circuit that is protected by an external GFCI outlet.

ELECTRICAL

VOLTAGE	PHASE	CYCLE/ HZ	AMPS	kW	CORD & PLUG INCLUDED
125	1	50/60	12.8	1.6	NEMA 5-15P 15A- 125V PLUG
208-240 (AGENCY)	1	50/60	6.5	1.6	NEMA 6-15P 15A - 250V PLUG
at 208	1	50/60	5.9	1.2	
at 240	1	50/60	7.0	1.6	
230	1	50/60	6.5	1.5	CEE 7/7 220-230V PLUG

ELECTRICAL • 1000-BQ2/128

VOLTAGE	PHASE	CYCLE/ HZ	AMPS	kW	CORD & PLUG INCLUDED
125	1	50/60	18.4	2.30	NEMA 5-20P 20A- 125V PLUG
208-240 (AGENCY)	1	50/60	8.3	2.0	NEMA 6-15P 15A - 250V PLUG
208	1	50/60	7.6	1.6	
240	1	50/60	8.7	2.1	
230	1	50/60	8.4	1.95	CEE 7/7 220-230V PLUG

ELECTRICAL • 1000-BQ2/192

VOLTAGE	PHASE	CYCLE/ HZ	AMPS	kW	CORD & PLUG INCLUDED
125	1	50/60			
POWER SWITCH IN LOW POSITION			16.0	2.0	NEMA L5-20P 20A- 125V PLUG
POWER SWITCH IN HIGH POSITION			24.0 MAX	3.0	NEMA L5-30P 30A - 125V PLUG
208-240 (AGENCY)	1	50/60	12.5	3.0	NEMA 6-15P 15A - 250V PLUG
at 208	1	50/60	12.3	2.5	
at 240	1	50/60	14.2	3.4	
230	1	50/60	13.0	3.0	CEE 7/7 220-230V PLUG

Before operating the unit, clean both the interior and exterior of the unit with a clean, damp cloth and mild soap solution. Rinse carefully. Clean and install the shelf slides and shelves.

Become familiar with the operation of the controls. Read this manual and keep it in a secure location.

The appliance is equipped with a special heating cable. Through this Halo Heat concept, the heating cable is mounted against the walls of the unit to provide an evenly applied heat source controlled by a thermostat. The design and operational characteristics of the unit eliminate the need for a moisture pan or a heat circulating fan. Through even heat application, the quality of food products is maintained up to several hours or more.

START-UP....

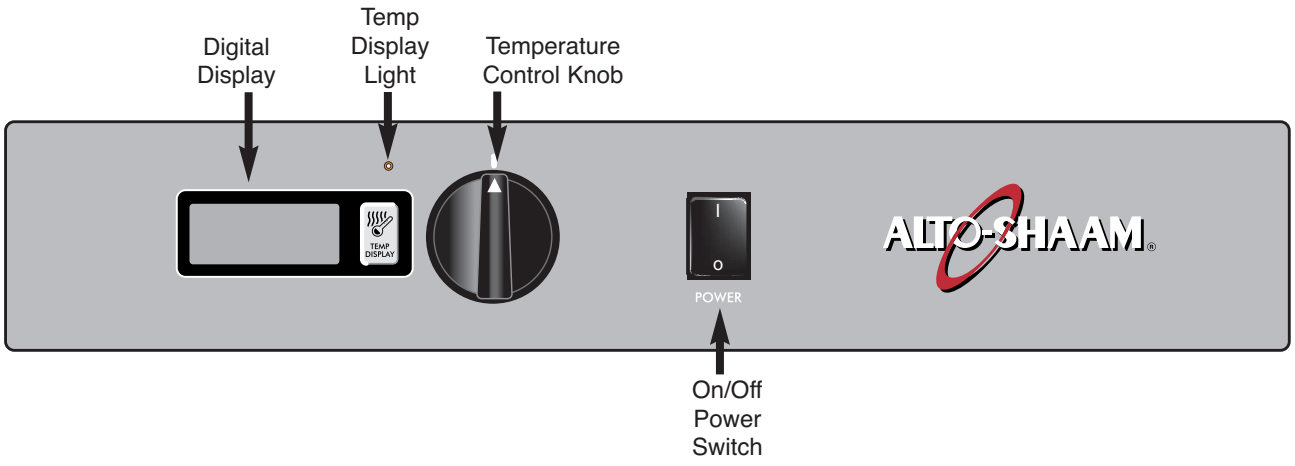
1. Connect the electric cord to an appropriate power outlet.
2. Close the compartment vents located on the inside of each compartment door.
3. Press the power ON for the appropriate compartments. The power button will illuminate.
4. Rotate the control knob to the desired holding temperature. The temperature will be displayed on the digital display.
5. The temperature display light will illuminate when the inside air reaches the desired holding temperature.

TO TOGGLE BETWEEN FAHRENHEIT AND CELSIUS

The factory default is Fahrenheit. To change to Celsius:

1. With the control OFF (i.e. temperature setting in the OFF position), press and hold the Temperature Display button for 5 seconds.
2. The control will show "degC" for 3 seconds to verify selection and then show the temperature. (Set Point or Actual, whichever the user has selected) in °C.
3. Repeat to toggle to Fahrenheit.

Note: With a power failure, factory test, etc., the control will retain the °C or °F setting selected by the user when power is restored.



OPERATION

HOLDING PROCEDURE

1. Preheat at 200°F for 30 minutes.

Allow a minimum of 30 minutes for preheating before loading the banquet cart with product.

2. Load the cart with hot food only.

The purpose of the banquet cart is to maintain hot food at proper serving temperature. Only hot food should be placed into the banquet cart. Before loading the cart with food, use a food thermometer to make certain all products have reached an internal temperature range of 140° to 160°F (60° to 71°C). Any food product not within the proper temperature range should be heated before loading into the banquet cart. For best results, use a Halo Heat Low Temperature Cooking and Holding Oven set at 250° to 275°F (121° to 135°C), or a Combitherm oven, to bring the product within the correct temperature range.

3. Load covered plates or carriers into the banquet cart.

After the food has reached proper serving temperature:

A. Use HEATED plates only.

B. Load each series of four (4) plates into the banquet cart as soon as assembled and as quickly as possible to retain maximum heat.

C. Load the plates in the upper section of the banquet cart first.

D. Securely close the doors of the banquet cart after loading each series of plates.

E. When loading the upper section of the banquet cart, the door on the lower section should remain closed.

F. When loading the lower section of the banquet cart, the door on the upper section should remain closed.

4. Reset the thermostat to desired temperature.

After the cart has been completely filled with product, check to make certain the doors are securely closed, and reset the thermostat to to the desired holding temperature or the suggested 180°F (82°C).

The proper temperature range for the products being held, and whether or not to open or close the door vents, will depend on the type and quantity of product. When holding food for prolonged periods, it is advisable to periodically check the internal temperature of each item with a food thermometer to assure maintenance of the proper temperature range of 140° to 160°F (60° to 71°C).

5. Unload covered plates, trays or plate carriers as needed.

A. Unload the items from the lower section of the cart first, and work up toward the top of the cart.

B. When unloading the lower section of the banquet cart, the door on the upper section should remain closed.

C. When unloading the upper section of the cart, the door on the lower section should remain closed.

D. Securely close the doors of the cart after each product removal.

GENERAL HOLDING GUIDELINES

Chefs, cooks and other specialized food service personnel employ varied methods of cooking. Proper holding temperatures for a specific food product must be based on the moisture content of the product, product density, volume, and proper serving temperatures. Safe holding temperatures must also be correlated with palatability in determining the length of holding time for a specific product.

Halo Heat maintains the maximum amount of product moisture content without the addition of water, water vapor, or steam. Maintaining maximum natural product moisture preserves the natural flavor of the product and provides a more genuine taste. In addition to product moisture retention, the gentle properties of Halo Heat maintain a consistent temperature throughout the cabinet without the necessity of a heat distribution fan, thereby preventing further moisture loss due to evaporation or dehydration.

When product is removed from a high temperature cooking environment for immediate transfer into equipment with the lower temperature required for hot food holding, condensation can form on the outside of the product and on the inside of plastic containers used in self-service applications. Allowing the product to release the initial steam and heat produced by high temperature cooking can alleviate this condition. To preserve the safety and quality of freshly cooked foods however, a maximum of 1 to 2 minutes must be the only time period allowed for the initial heat to be released from the product.

Most Halo Heat holding equipment is provided with a thermostat control between 60° and 200°F (16° to 93°C). If the unit is equipped with vents, close the vents for moist holding and open the vents for crisp holding.

If the unit is equipped with a thermostat indicating a range of between 1 and 10, use a metal-stemmed indicating thermometer to measure the internal temperature of the product(s) being held. Adjust the thermostat setting to achieve the best overall setting based on internal product temperature.

HOLDING TEMPERATURE RANGE

MEAT	FAHRENHEIT	CELSIUS
BEEF ROAST — Rare	130°F	54°C
BEEF ROAST — Med/Well Done	155°F	68°C
BEEF BRISKET	160° — 175°F	71° — 79°C
CORN BEEF	160° — 175°F	71° — 79°C
PASTRAMI	160° — 175°F	71° — 79°C
PRIME RIB — Rare	130°F	54°C
STEAKS — Broiled/Fried	140° — 160°F	60° — 71°C
RIBS — Beef or Pork	160°F	71°C
VEAL	160° — 175°F	71° — 79°C
HAM	160° — 175°F	71° — 79°C
PORK	160° — 175°F	71° — 79°C
LAMB	160° — 175°F	71° — 79°C
POULTRY		
CHICKEN — Fried/Baked	160° — 175°F	71° — 79°C
DUCK	160° — 175°F	71° — 79°C
TURKEY	160° — 175°F	71° — 79°C
GENERAL	160° — 175°F	71° — 79°C
FISH/SEAFOOD		
FISH — Baked/Fried	160° — 175°F	71° — 79°C
LOBSTER	160° — 175°F	71° — 79°C
SHRIMP — Fried	160° — 175°F	71° — 79°C
BAKED GOODS		
BREADS/ROLLS	120° — 140°F	49° — 60°C
MISCELLANEOUS		
CASSEROLES	160° — 175°F	71° — 79°C
DOUGH — Proofing	80° — 100°F	27° — 38°C
EGGS —Fried	150° — 160°F	66° — 71°C
FROZEN ENTREES	160° — 175°F	71° — 79°C
HORS D'OEUVRES	160° — 180°F	71° — 82°C
PASTA	160° — 180°F	71° — 82°C
PIZZA	160° — 180°F	71° — 82°C
POTATOES	180°F	82°C
PLATED MEALS	140° — 165°F	60°— 74°C
SAUCES	140° — 200°F	60° — 93°C
SOUP	140° — 200°F	60° — 93°C
VEGETABLES	160° — 175°F	71° — 79°C

THE HOLDING TEMPERATURES LISTED ARE SUGGESTED GUIDELINES ONLY. ALL FOOD HOLDING SHOULD BE BASED ON INTERNAL PRODUCT TEMPERATURES. ALWAYS FOLLOW LOCAL HEALTH (HYGIENE) REGULATIONS FOR ALL INTERNAL TEMPERATURE REQUIREMENTS.

CARE AND CLEANING

CLEANING AND PREVENTIVE MAINTENANCE

PROTECTING STAINLESS STEEL SURFACES

It is important to guard against corrosion in the care of stainless steel surfaces. Harsh, corrosive, or inappropriate chemicals can completely destroy the protective surface layer of stainless steel. Abrasive pads, steel wool, or metal implements will abrade surfaces causing damage to this protective coating and will eventually result in areas of corrosion. Even water, particularly hard water that contains high to moderate concentrations of chloride, will cause oxidation and pitting that result in rust and corrosion. In addition, many acidic foods spilled and left to remain on metal surfaces are contributing factors that will corrode surfaces.

Proper cleaning agents, materials, and methods are vital to maintaining the appearance and life of this appliance. Spilled foods should be removed and the area wiped as soon as possible but at the very least, a minimum of once a day. Always thoroughly rinse surfaces after using a cleaning agent and wipe standing water as quickly as possible after rinsing.

CLEANING AGENTS

Use non-abrasive cleaning products designed for use on stainless steel surfaces. Cleaning agents must be chloride-free compounds and must not contain quaternary salts. Never use hydrochloric acid (muriatic acid) on stainless steel surfaces. Always use the proper cleaning agent at the manufacturer's recommended strength. Contact your local cleaning supplier for product recommendations.

CLEANING MATERIALS

The cleaning function can usually be accomplished with the proper cleaning agent and a soft, clean cloth. When more aggressive methods must be employed, use a non-abrasive scouring pad on difficult areas and make certain to scrub with the visible grain of surface metal to avoid surface scratches. Never use wire brushes, metal scouring pads, or scrapers to remove food residue.

⚠ CAUTION

TO PROTECT STAINLESS STEEL SURFACES, COMPLETELY AVOID THE USE OF ABRASIVE CLEANING COMPOUNDS, CHLORIDE BASED CLEANERS, OR CLEANERS CONTAINING QUATERNARY SALTS. NEVER USE HYDROCHLORIC ACID (MURIATIC ACID) ON STAINLESS STEEL. NEVER USE WIRE BRUSHES, METAL SCOURING PADS OR

CARE AND CLEANING

THOROUGHLY CLEAN THE UNIT DAILY

The cleanliness and appearance of this unit will contribute considerably to operating efficiency and savory, appetizing food. Good equipment kept clean works better and lasts longer.

1. Disconnect unit from power source, and let cool.

2. Remove all detachable items such as plate carriers, shelves and side racks. Clean these items separately with a good grease solvent or commercial detergent. Rinse well and dry.

3. Clean interior metal surfaces of the unit with a damp, clean cloth and any good commercial detergent or grease solvent at the recommended strength. Spray heavily soiled areas with a water soluble degreaser and let stand for 10 minutes, then remove soil with a plastic scouring pad. Rinse by wiping with a sponge and clean warm water to remove all residue. Remove excess water with sponge and wipe dry with a clean cloth or air dry. Replace side racks and shelves.

NOTE: Avoid the use of abrasive cleaning, compounds, chloride based cleaners, or cleaners containing quaternary salts. Never use hydrochloric acid (muriatic acid) on stainless steel.

4. Clean control panel, door vents, door handles, and door gaskets thoroughly since these areas harbor food debris. Rinse by wiping with sponge and clean warm water. Wipe dry with a clean cloth.

5. Interior can be wiped with a sanitizing solution after cleaning and rinsing. This solution must be approved for use on stainless steel food contact surfaces.

6. To help maintain the protective film coating on polished stainless steel, clean the exterior of the unit with a cleaner recommended for stainless steel surfaces. Spray the cleaning agent on a clean cloth and wipe with the grain of the stainless steel.

Always follow appropriate state or local health (hygiene) regulations regarding all applicable cleaning and sanitation requirements for foodservice equipment.

⚠ DANGER

DISCONNECT UNIT FROM POWER SOURCE BEFORE CLEANING OR SERVICING.

DANGER

AT NO TIME SHOULD THE INTERIOR OR EXTERIOR BE STEAM CLEANED, HOSED DOWN, OR FLOODED WITH WATER OR LIQUID SOLUTION OF ANY KIND. DO NOT USE WATER JET TO CLEAN.

SEVERE DAMAGE OR ELECTRICAL HAZARD COULD RESULT.

WARRANTY BECOMES VOID IF APPLIANCE IS FLOODED

SANITATION

Food flavor and aroma are usually so closely related that it is difficult, if not impossible, to separate them. There is also an important, inseparable relationship between cleanliness and food flavor. Cleanliness, top operating efficiency, and appearance of equipment contribute considerably to savory, appetizing foods. Good equipment that is kept clean, works better and lasts longer.

Most food imparts its own particular aroma and many foods also absorb existing odors. Unfortunately, during this absorption, there is no distinction between GOOD and BAD odors. The majority of objectionable flavors and odors troubling food service operations are caused by bacteria growth. Sourness, rancidity, mustiness, stale or other OFF flavors are usually the result of germ activity.

The easiest way to insure full, natural food flavor is through comprehensive cleanliness. This means good control of both visible soil (dirt) and invisible soil (germs). A thorough approach to sanitation will provide essential cleanliness. It will assure an attractive appearance of equipment, along with maximum efficiency and utility. More importantly, a good sanitation program provides one of the key elements in the prevention of food-borne illnesses.

A controlled holding environment for prepared foods is just one of the important factors involved in the prevention of food-borne illnesses. Temperature monitoring and control during receiving, storage, preparation, and the service of foods are of equal importance.

The most accurate method of measuring safe temperatures of both hot and cold foods is by internal product temperature. A quality thermometer is an effective tool for this purpose, and should be routinely used on all products that require holding at a specific temperature.

A comprehensive sanitation program should focus on the training of staff in basic sanitation procedures. This includes personal hygiene, proper handling of raw foods, cooking to a safe internal product temperature, and the routine monitoring of internal temperatures from receiving through service.

Most food-borne illnesses can be prevented through proper temperature control and a comprehensive program of sanitation. Both these factors are important to build quality service as the foundation of customer satisfaction. Safe food handling practices to prevent food-borne illness is of critical importance to the health and safety of your customers.

HACCP, an acronym for Hazard Analysis (at) Critical Control Points, is a quality control program of operating procedures to assure food integrity, quality, and safety. Taking steps necessary to augment food safety practices are both cost effective and relatively simple. While HACCP guidelines go far beyond the scope of this manual, additional information is available by contacting:

CENTER FOR FOOD SAFETY AND APPLIED NUTRITION FOOD AND DRUG ADMINISTRATION 1-888-SAFEFOOD

INTERNAL FOOD PRODUCT TEMPERATURES		
HOT FOODS		
DANGER ZONE	40° TO 140°F	(4° TO 60°C)
CRITICAL ZONE	70° TO 120°F	(21° TO 49°C)
SAFE ZONE	140° TO 165°F	(60° TO 74°C)
COLD FOODS		
DANGER ZONE	ABOVE 40°F	(ABOVE 4°C)
SAFE ZONE	36°F TO 40°F	(2°C TO 4°C)
FROZEN FOODS		
DANGER ZONE	ABOVE 32°F	(ABOVE 0°C)
CRITICAL ZONE	0° TO 32°F	(-18° TO 0°C)
SAFE ZONE	0°F or below	(-18°C or below)

MAINTENANCE

THERMOSTAT ACCURACY

The electronic thermostat is a precise instrument and is designed to offer trouble free service. If you suspect the temperature inside the holding compartment does not match the temperature indicated on the digital display, follow the instructions listed below.

1. Check to make certain the unit voltage matches the power source. A power source less than that required to operate the unit will result in inaccurate temperatures.
2. Verify the temperature inside the holding compartment with a qualify thermal indicator.
   - **A.** With the exception of the wire shelves, completely empty the holding compartment.
   - **B.** Make certain the holding cabinet sensor, located inside the holding compartment at the left side of the unit, is completely clean.
   - **C.** Suspend the thermal indicator in the center of the holding compartment.
   - **D.** Allow the temperature set on the electronic thermostat to stabilize for a minimum of one hour before comparing the digital display with the reading on the thermal indicator.

     DO NOT OPEN THE CABINET DOOR(S) DURING THE TEMPERATURE STABILIZATION PERIOD.

If the reading on the thermal indicator does not match the digital display, there may be a problem with the air sensor. See troubleshooting guide in this manual; or call the factory service department for advice.

⚠ DANGER

DISCONNECT UNIT FROM POWER SOURCE BEFORE CLEANING OR SERVICING.

SERVICE

TROUBLESHOOTING - MANUAL CONTROL

Error Code	Description/Results	Possible Cause Service Required
E-10	**Air Sensor Fault (shorted)** *Inoperative Unit*	Air sensor is shorted. Air sensor defective? Test air sensor by placing sensor in ice water bath 32°F (0°C) and using an ohm-meter set on the ohm scale. The reading should be 100 ohms resistance. If it is more than 2 ohms higher or lower, sensor needs to be replaced. If Ohm reading is 100, replace display. If Ohm reading is not 100, replace sensor.
E-11	**Air Sensor Fault (open)** *Inoperative Unit*	Air sensor is open or connection failure. Air sensor defective? See above for air sensor test.
E-30	**Under temperature** *Oven will not reach set temperature*	Unit door closed? Door gasket need replacement? Preheat skipped? Unit overloaded or holding frozen product? Defective air sensor or probe? De-fective solid state relay? Bad wire connections or open heating cable? If none of the above, contact Alto-Shaam Service Department..
E-31	**Over temperature** *Unit will shut down*	Shorted cable? Defective solid state relay? Defective air sensor? If none of the above, contact Alto-Shaam Service Department..
E-70	**Configuration error** *Inoperative Unit*	Contact Alto-Shaam Service Department.
E-82 or E-83	**EEPROM - Calibration data error** *Inoperative Unit*	Contact Alto-Shaam Service Department.
E-90	**Button shorted** *Inoperative Control*	Stuck button on control panel. Check buttons. If control is still inoperative, contact Alto-Shaam Service Department.
E-91	**Input failure**	Contact Alto-Shaam Service Department.

⚠ DANGER

DISCONNECT UNIT FROM POWER SOURCE BEFORE CLEANING OR SERVICING.

CAUTION

THIS SECTION IS PROVIDED FOR THE ASSISTANCE OF QUALIFIED SERVICE TECHNICIANS ONLY AND IS NOT INTENDED FOR USE BY UNTRAINED OR UNAUTHORIZED SERVICE PERSONNEL.

SERVICE PARTS LIST

Description	1000-BQ2/96	Qty	1000-BQ2/128	Qty	1000-BQ2/192	Qty
Control panel	5006725		5006825		5006797	
Panel overlay LH	PE-27940		PE-27940		PE-27940	
Panel overlay RH					PE-27942	
Casing, side LH	5006745		5006745		5006745	
Casing, side RH	5006744		5006744		5006744	
Back, casing	11500		12169		11500 (LH)	
Back, casing RH					11501 (RH)	
Top	4948		14004		4955	
Bumper, aluminum, 120V/208V	5007309		5007310		5007311	
Bumper, aluminum, 230V	14980		14982		14983	
Bumper, rubber perimeter	BM-24766	14'	BM-24766	15'	BM-24766	16'
Bumper, aluminum frame, 120V/208V	BM-28029		BM-23030			
Bumper, aluminum frame, 120V/208V, rear					BM-27494	
Bumper, aluminum frame, 120V/208V, front					BM-27495	
Bumper, aluminum frame, 230V	BM-24950		BM-24951			
Bumper, aluminum frame, 230V, front					BM-28032	
Bumper, aluminum frame, 230V, rear					BM-27494	
Shelf	SH-2835	4	SH-22727	4	SH-2835	4
Slide for shelf	1061	8	1061	8	1061	16
Clip, shelf	11533	4	11533	4	11533	8
Support, clip, bottom	11541	5	11541	5	11541	10
Support, clip, top	11542	5	11542	5	11542	10
Mounting stud for support	ST-2547	20	ST-2547	20	ST-2547	40
Guard for sensor	1008272		1008272		1008272	
Plate, cord grip	11772		11772			
Block, mounting sensor	BK-27878		BK-27878		BK-27878	
Block, terminal	BK-3019		BK-3019		BK-3019	
Cable, heating, 120V	4880		4881	2	4880	1/cavity
Cable, heating, 208/240V	4881		4879		4881	1/cavity
Control, manual	CC-34488		CC-34488		CC-34488	
Cordset, 120V	CD-3397		CD-3397		See list below*	
Cordset, 208V	CD-3551		CD-3551		CD-3551	
Cordset, 230V	CD-3922		CD-3922		CD-3922	
Knob, control	KN-26568		KN-26568		KN-26568	
Probe	PR-34494		PR-34494		PR-34494	
Switch, 208V, 230V power	SW-34351		SW-34351		SW-34351	
Switch, 120V power	SW-34375		SW-34375		SW-34375	
Caster, 6" (152mm) rigid	CS-2042		CS-2042		CS-2042	
Caster, 6" (152mm) swivel/brake	CS-2231		CS-2231		CS-2231	
Caster mount screws	SC-2351	16	SC-2351	16	SC-2351	24
Door assembly	5001330	2	5001330	2	5001330	4
Gasket for door	GS-27879	2	GS-27879	2	GS-27879	4
Handle for door	HD-2566	2	HD-2566	2	HD-2566	4
Handle, plastic transport	HD-26792	4	HD-26792	4	HD-26792	4
Hinge	HG-2015	2	HG-2015	2	HG-2015	4
Hinge, insert	HG-22672	4	HG-22672	4	HG-22672	4/door
Shim, hinge	13675	8	13675	8	13675	16
Cover for vent	13253	8/door	13253	8/door	13253	8/door
Insulation for cable kit	IN-22364		IN-22364		IN-22364	
Insulation	IN-2381		IN-2381		IN-2381	

***Cordset, 120V for 1000-BQ2/ 192**

Cordset, 10/3, SJEOW-A	CD-33366
Cordset, 12/3 SJO, 20A	CD-3397
Connector, body, twist	CR-3308
Connector, body, twist	CR-3724
Inlet, male, twist, 30A	IT-3306
Inlet, male, twist, 20A	IT-3723
Switch, toggle, 3PDT, 3	SW-3617

Cable Heating Replacement Service Kit No. 4880

1000-BQ2/ 96 (125V) requires one (1) kit (129' of cable)
1000-BQ2/ 192 (125V) requires one (1) kit for one (1) cavity or two (2) kits for both cavities (129' of cable per cavity)

Service kit includes:

CB-3045	Cable Heating Element	134 feet
CR-3226	Ring Connector	4
IN-3488	Insulation Corner	1 foot
BU-3105	Shoulder Bushing	12
BU-3106	Cup Bushing	4
SL-3063	Insulating Sleeve	4
TA-3540	High Temperature Electrical Tape	1 roll
ST-2439	10.32 Stud	4
NU-2215	Hex Nut	8

Cable Heating Replacement Service Kit No. 4881

1000-BQ2/ 96 (208-240V) requires one (1) kit (204' of cable)
1000-BQ2/ 128 (120V) requires two (2) kits (360' of cable)
1000-BQ2/ 192 (208-240V) requires one (1) kit for one (1) cavity or two (2) kits for both cavities (204' of cable per cavity)

Service kit includes:

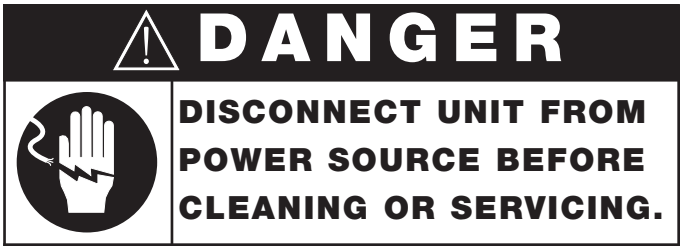
CB-3045	Cable Heating Element	210 feet
CR-3226	Ring Connector	12
IN-3488	Insulation Corner	1 foot
BU-3105	Shoulder Bushing	12
BU-3106	Cup Bushing	12
SL-3063	Insulating Sleeve	12
TA-3540	High Temperature Electrical Tape	1 roll
ST-2439	10.32 Stud	12
NU-2215	Hex Nut	24

Cable Heating Replacement Service Kit No. 4879

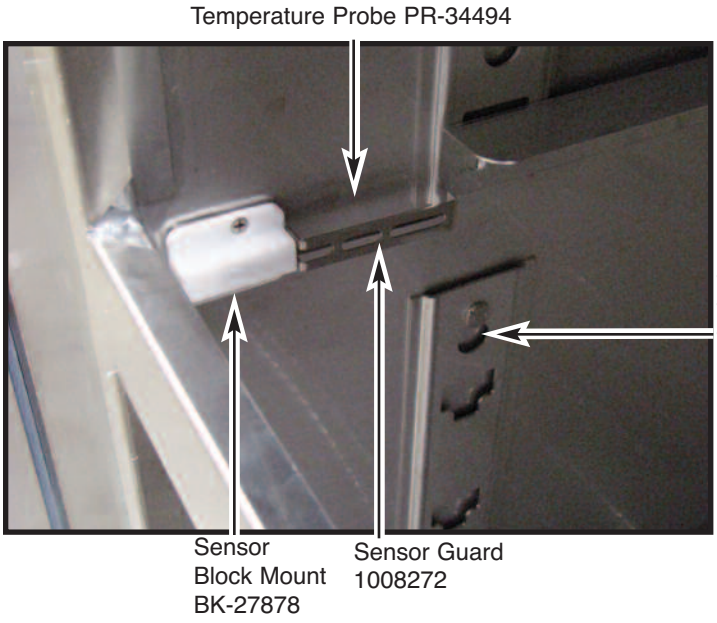
1000-BQ2/ 128 (208-240V) requires one (1) kit (120' of cable)

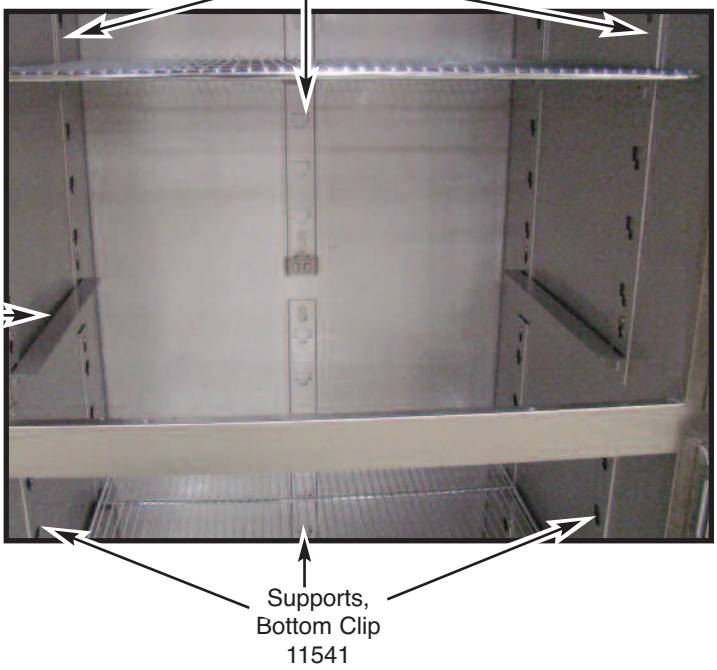
Service kit includes:

CB-3045	Cable Heating Element	112 feet
CR-3226	Ring Connector	6
IN-3488	Insulation Corner	1 foot
BU-3105	Shoulder Bushing	6
BU-3106	Cup Bushing	6
SL-3063	Insulating Sleeve	6
TA-3540	High Temperature Electrical Tape	1 roll
ST-2439	Stud 10.32	6
NU-2215	Hex Nut	12

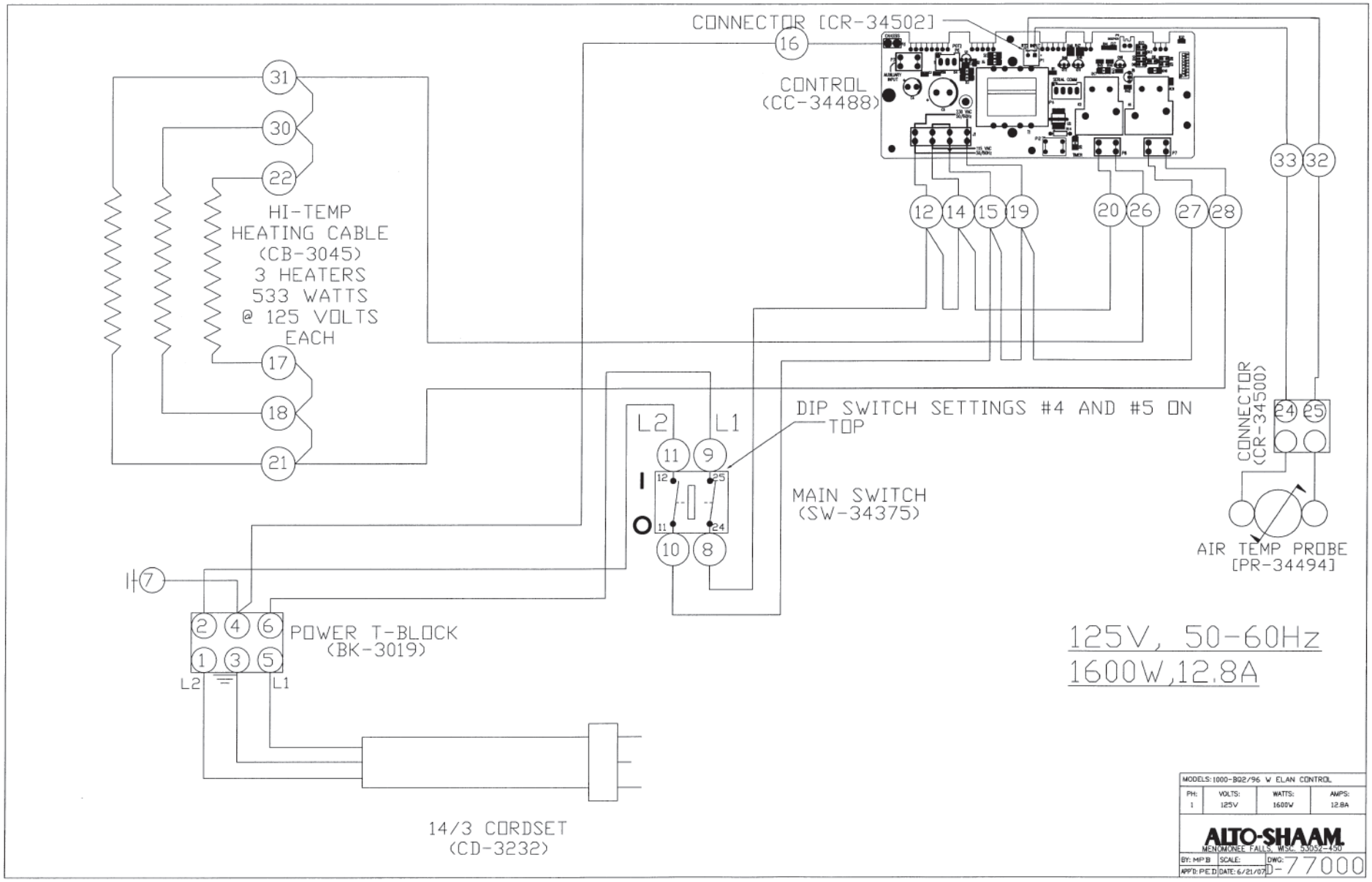


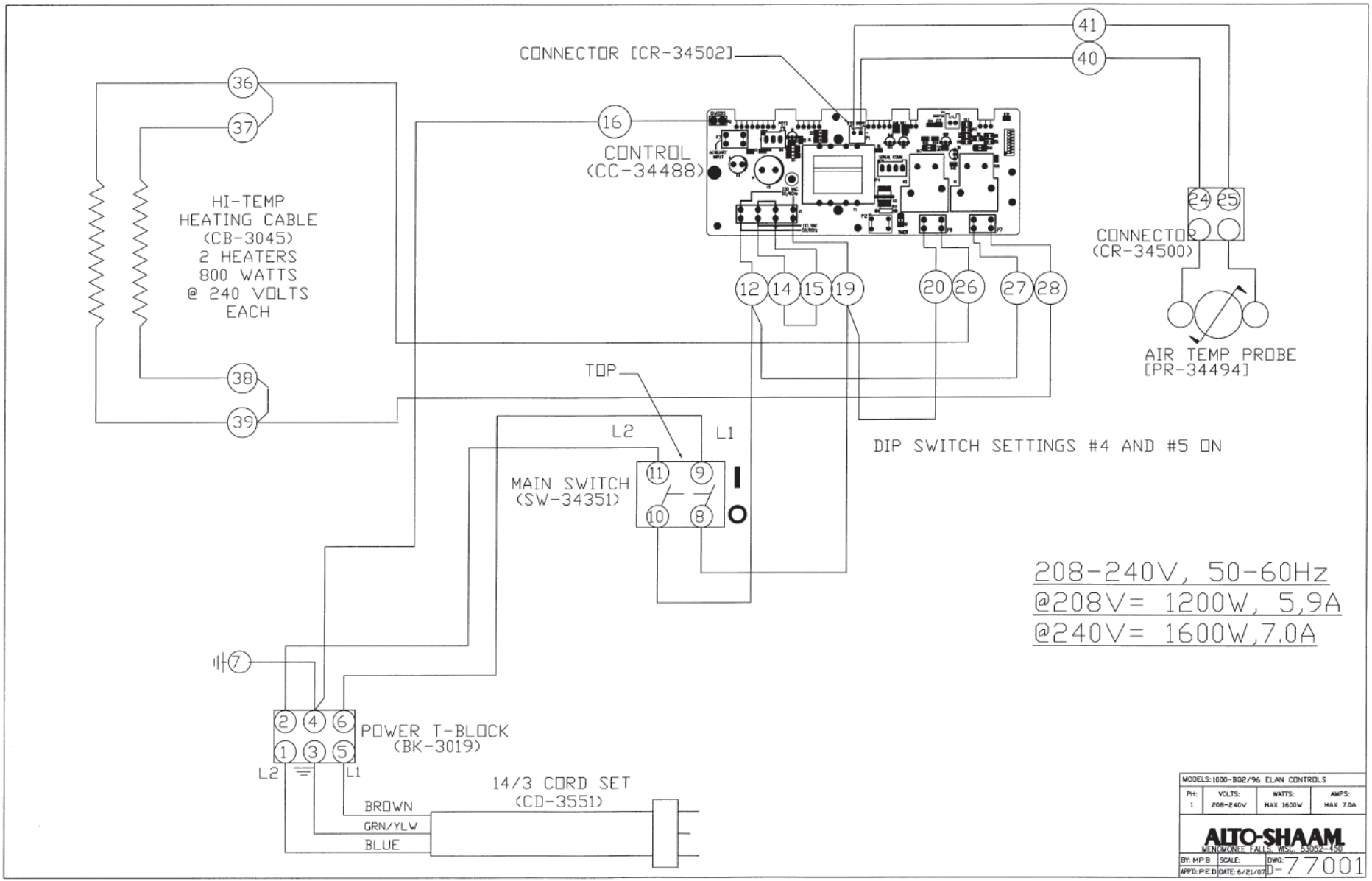
Control Panel
PE-27940
Door
Gasket
GS-27879
Shelves
SH-2835
Door
Handle
HD-2566
Caster,
swivel/brake
CS-2231
Caster, rigid
CS-2042

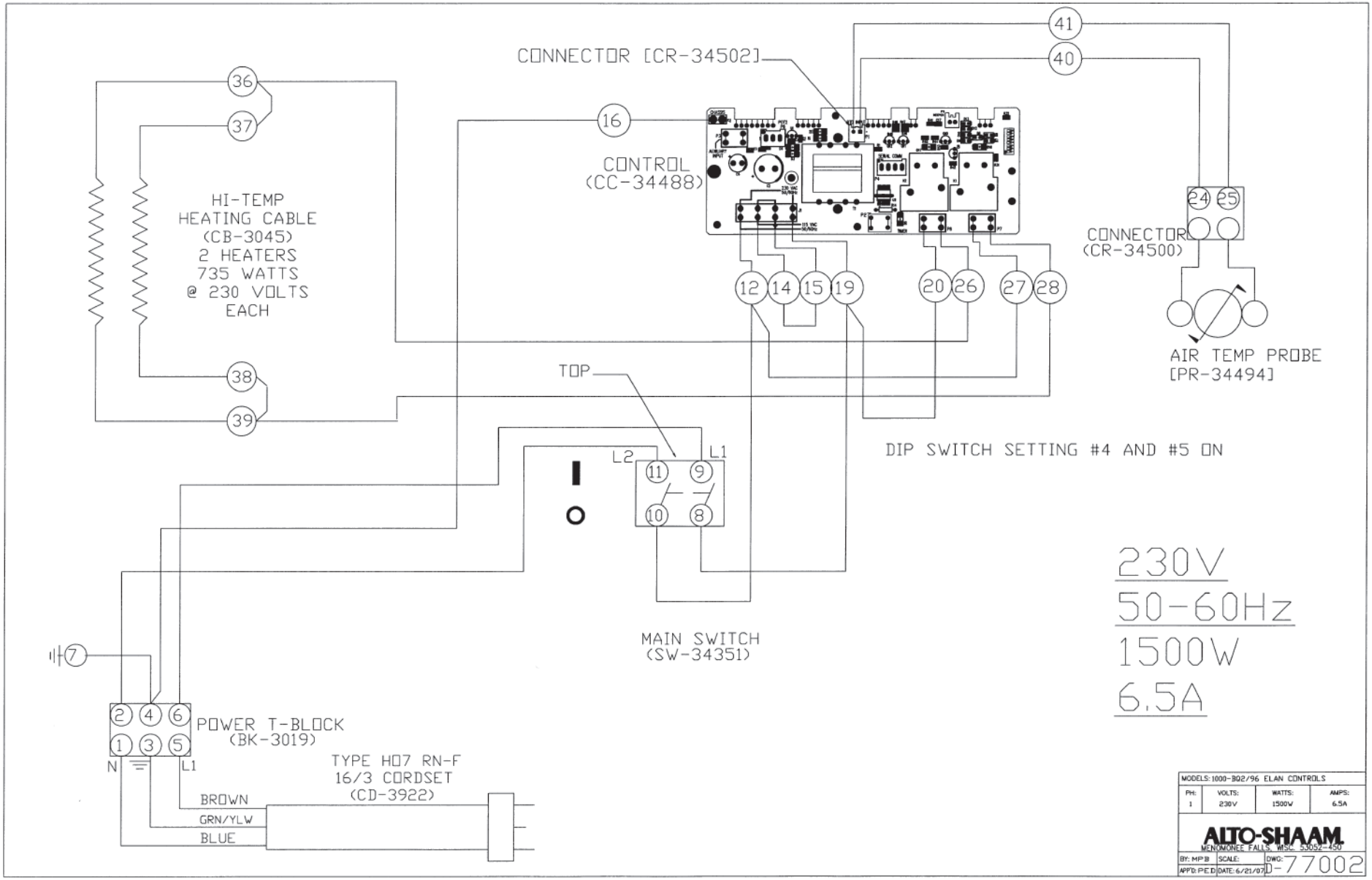

Temperature Probe PR-34494
Stud for Clip Support ST-2547
Sensor Block Mount BK-27878
Sensor Guard 1008272

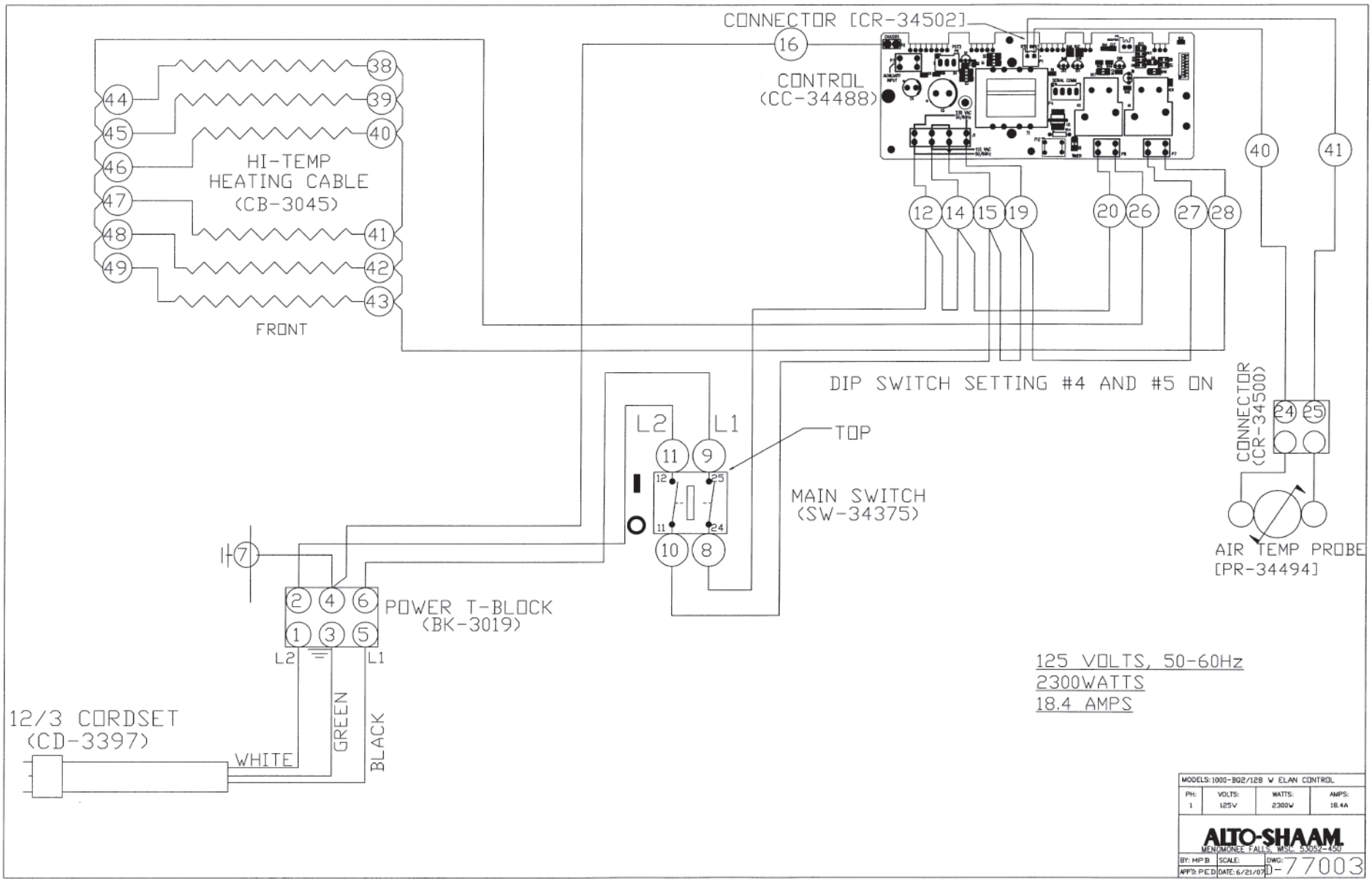

Supports, Top Clip 11542
Shelf Slide 1061
Supports, Bottom Clip 11541

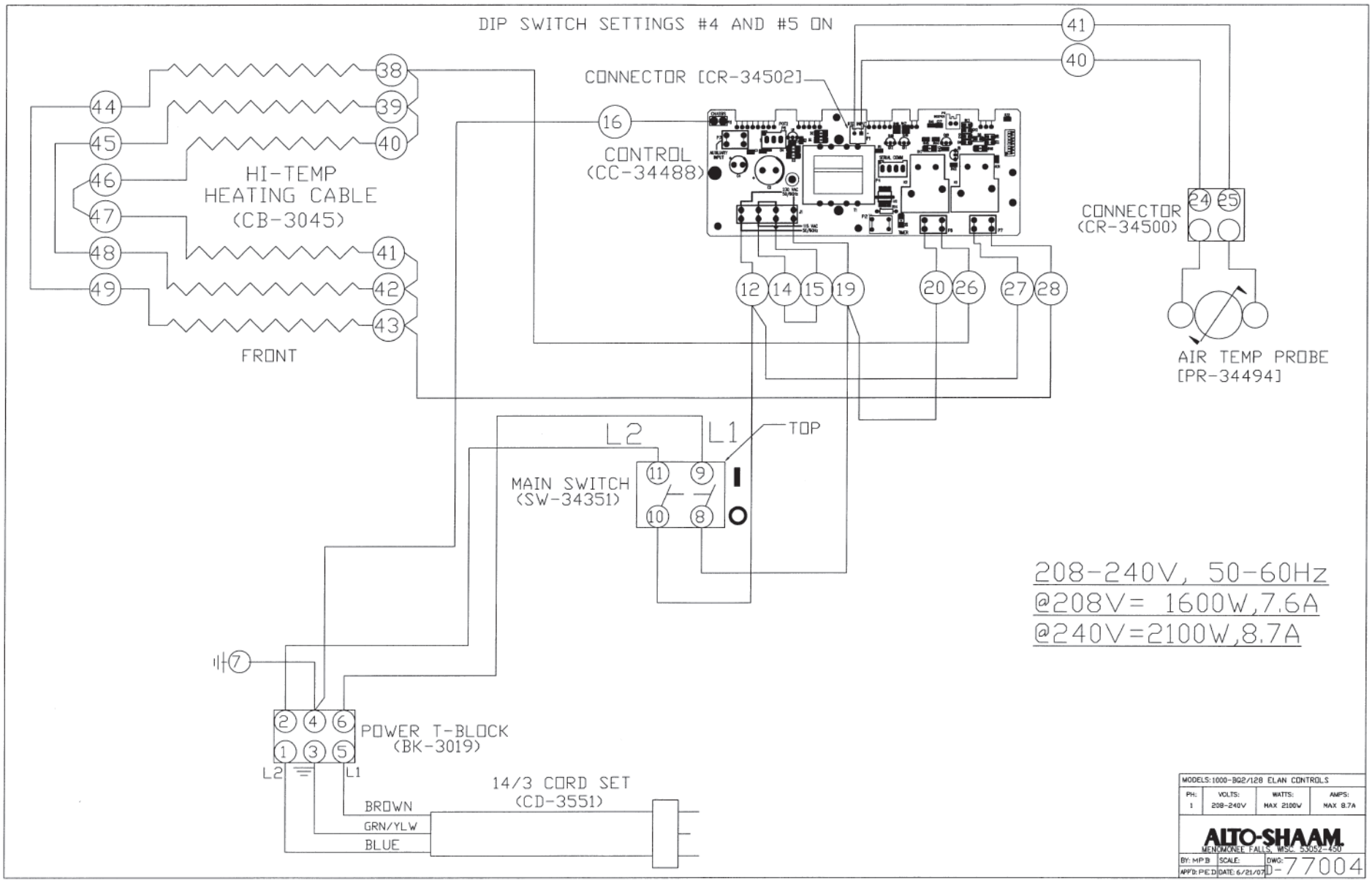
Door Vents

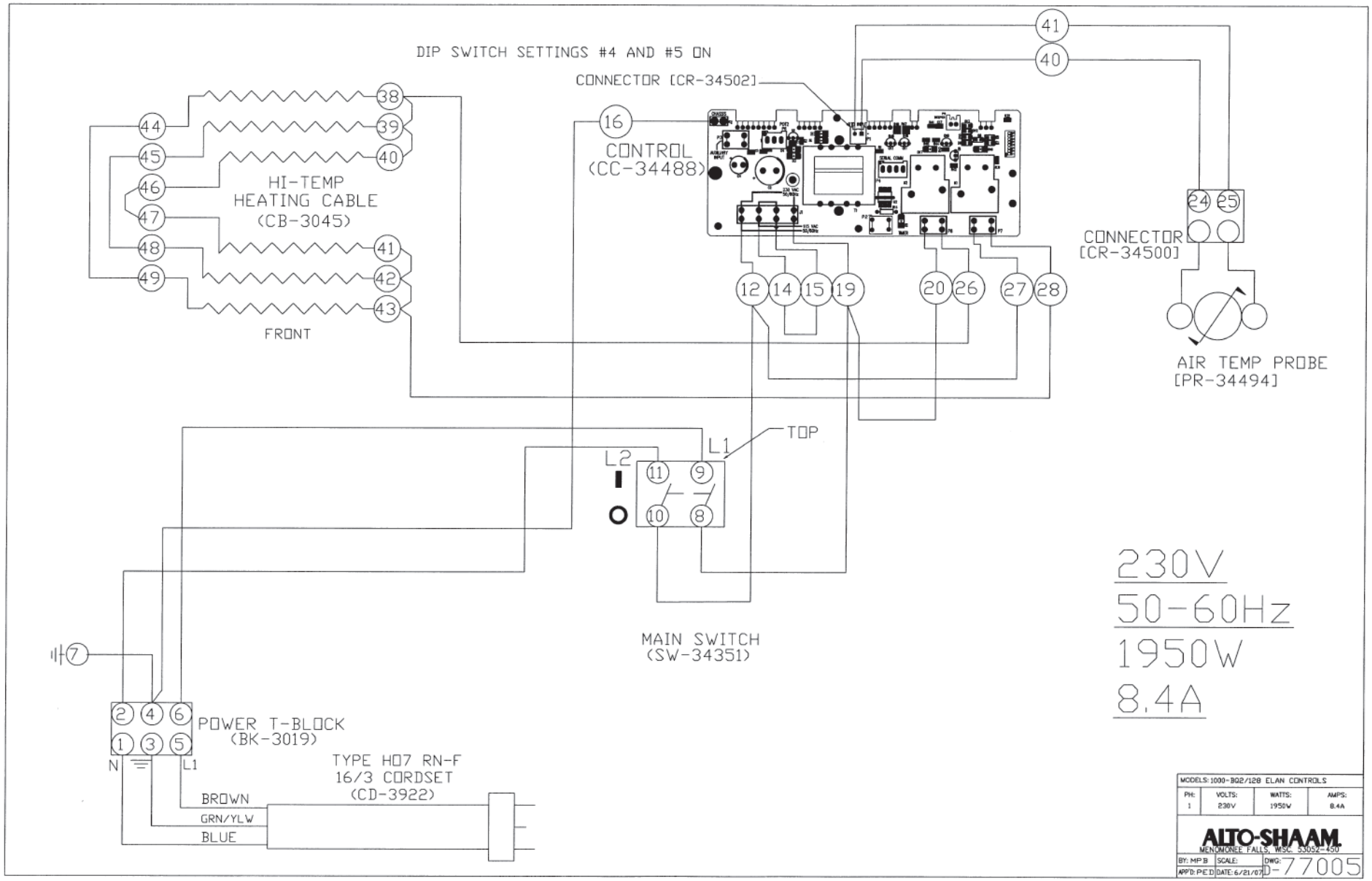

CONNECTOR [CR-34502]
16
CONTROL
(CC-34488)
31
30
22
HI-TEMP
HEATING CABLE
(CB-3045)
3 HEATERS
533 WATTS
@ 125 VOLTS
EACH
17
18
21
12 14 15 19 20 26 27 28
33 32
CONNECTOR
(CR-34500)
24 25
DIP SWITCH SETTINGS #4 AND #5 ON
TOP
L2
L1
11 9
12 25
11 24
10 8
MAIN SWITCH
(SW-34375)
AIR TEMP PROBE
[PR-34494]
7
2 4 6
1 3 5
POWER T-BLOCK
(BK-3019)
L2
L1
14/3 CORDSET
(CD-3232)
125V, 50-60Hz
1600W,12.8A
MODELS: 1000-802/96 W ELAN CONTROL
PH: 1
VOLTS: 125V
WATTS: 1600W
AMPS: 12.8A
ALTO-SHAAM
MENOMONEE FALLS, WISC. 53052-450
BY: MPB
SCALE:
DWG: D-77000
APP'D: PED
DATE: 6/21/07

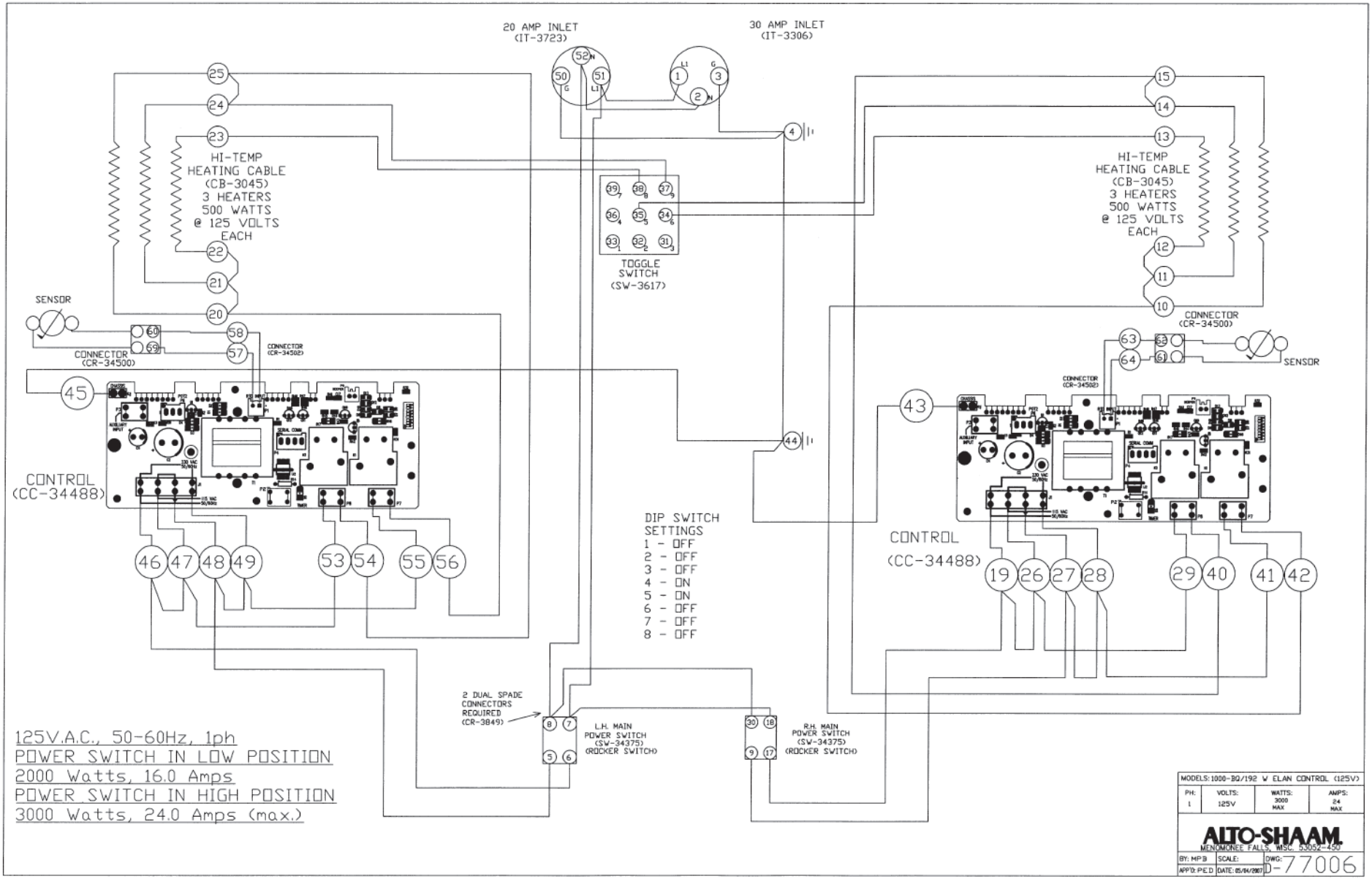

CONNECTOR [CR-34502]
41
40
36
37
16
CONTROL
(CC-34488)
HI-TEMP
HEATING CABLE
(CB-3045)
2 HEATERS
800 WATTS
@ 240 VOLTS
EACH
12 14 15 19 20 26 27 28
24 25
CONNECTOR
(CR-34500)
AIR TEMP PROBE
[PR-34494]
38
39
TOP
L2
L1
DIP SWITCH SETTINGS #4 AND #5 ON
MAIN SWITCH
(SW-34351)
11 9
10 8
208-240V, 50-60Hz
@208V= 1200W, 5.9A
@240V= 1600W,7.0A
7
2 4 6
1 3 5
POWER T-BLOCK
(BK-3019)
L2
L1
14/3 CORD SET
(CD-3551)
BROWN
GRN/YLW
BLUE
MODELS: 1000-802/96 ELAN CONTROLS
PH: 1
VOLTS: 208-240V
WATTS: MAX 1600W
AMPS: MAX 7.0A
ALTO-SHAAM
MENOMONEE FALLS, WISC. 53052-450
BY: MPB
SCALE:
DWG: D-77001
APP'D: P.E.D
DATE: 6/21/07

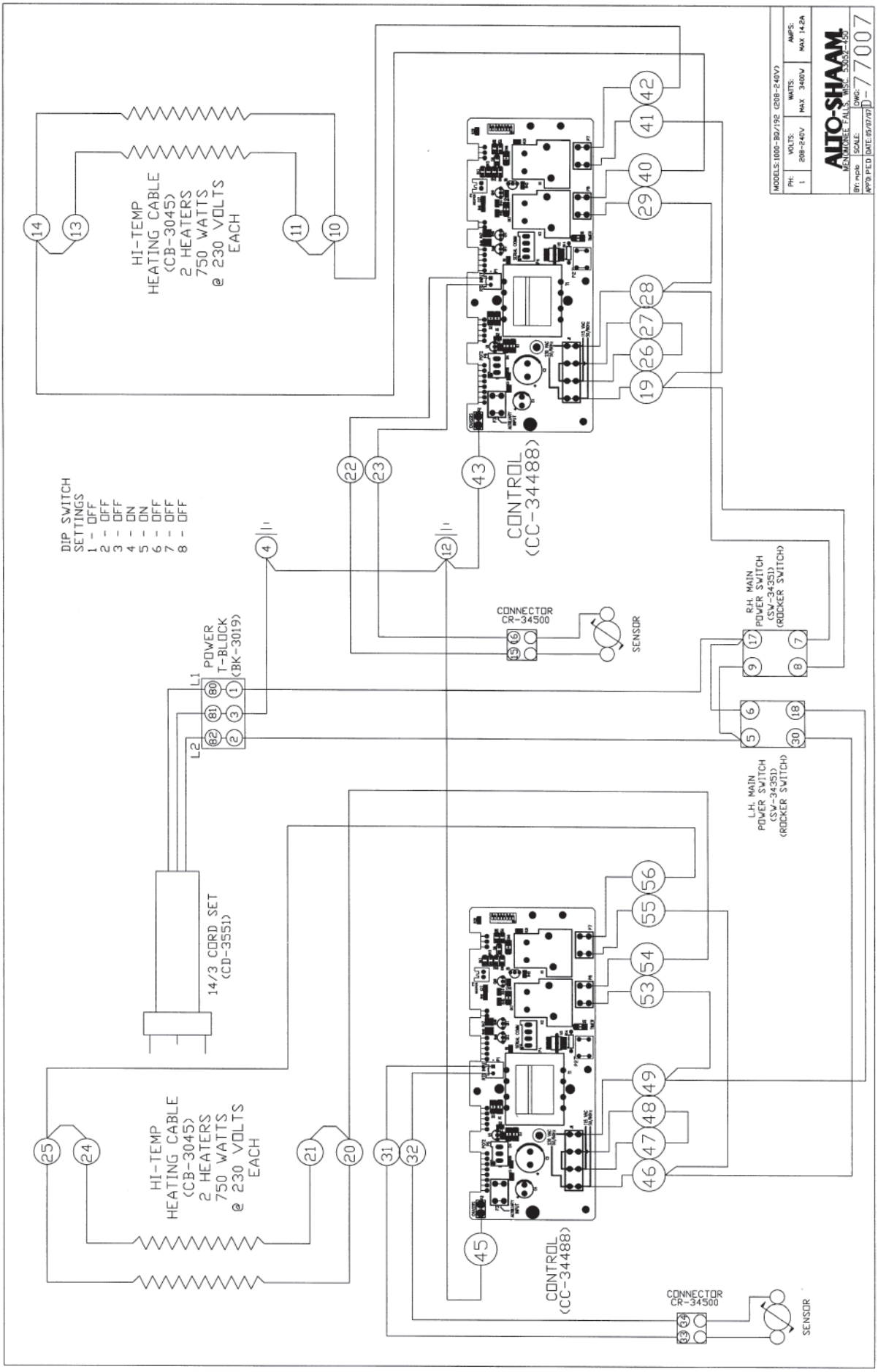

CONNECTOR [CR-34502]
41
40
36
37
16
CONTROL
(CC-34488)
HI-TEMP
HEATING CABLE
(CB-3045)
2 HEATERS
735 WATTS
@ 230 VOLTS
EACH
24
25
CONNECTOR
(CR-34500)
12
14
15
19
20
26
27
28
AIR TEMP PROBE
[PR-34494]
38
39
TOP
L2
L1
11
9
10
8
DIP SWITCH SETTING #4 AND #5 ON
MAIN SWITCH
(SW-34351)
230V
50-60Hz
1500W
6.5A
7
2
4
6
1
3
5
POWER T-BLOCK
(BK-3019)
N
L1
TYPE HO7 RN-F
16/3 CORDSET
(CD-3922)
BROWN
GRN/YLW
BLUE
MODELS: 1000-802/96 ELAN CONTROLS
PH: 1
VOLTS: 230V
WATTS: 1500W
AMPS: 6.5A
ALTO-SHAAM
MENOMONEE FALLS, WISC. 53052-450
BY: MPB
SCALE:
DWG: D-77002
APP'D: P.E.D.
DATE: 6/21/07

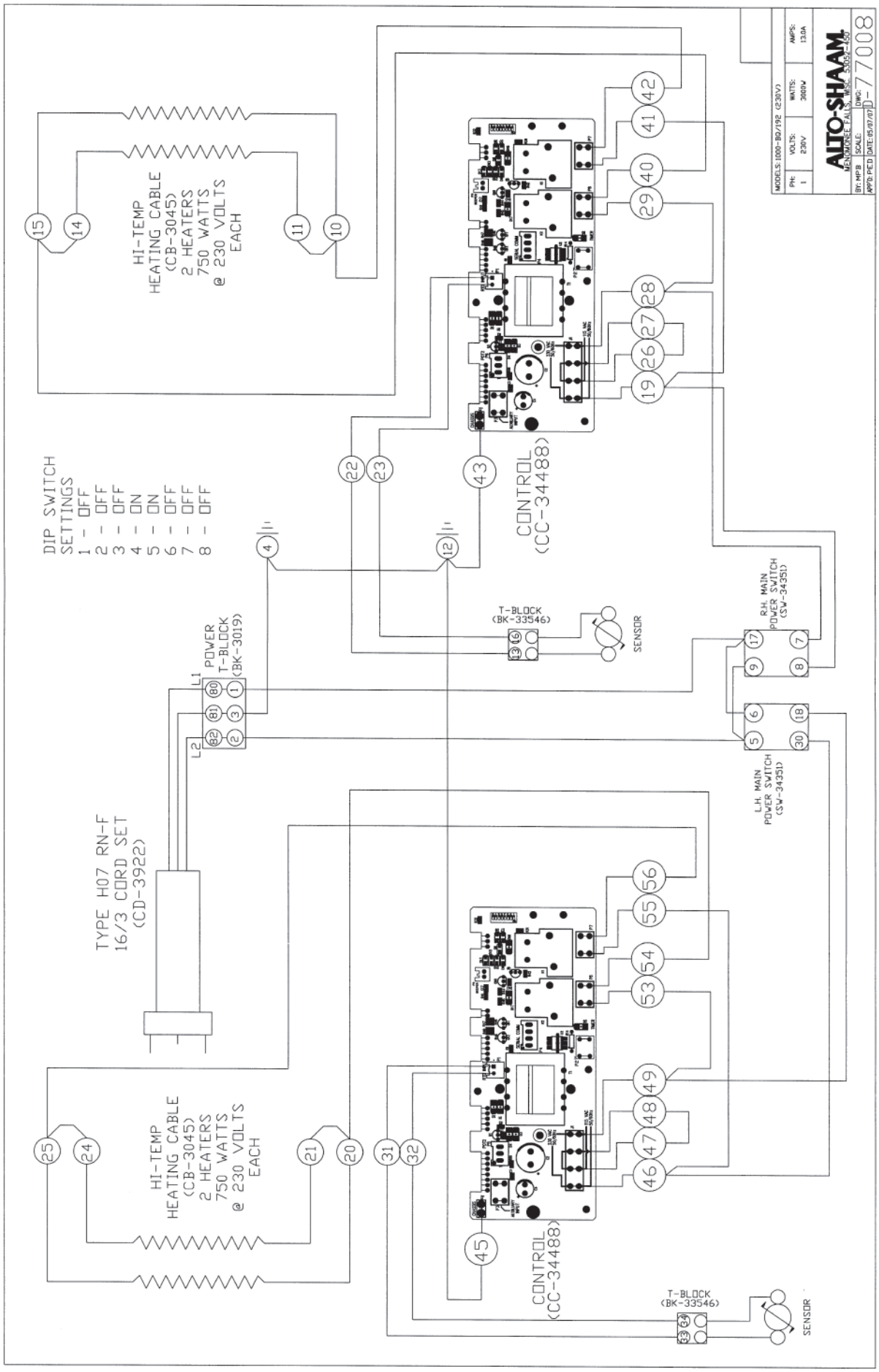

CONNECTOR [CR-34502]
16
CONTROL
(CC-34488)
HI-TEMP
HEATING CABLE
(CB-3045)
38
44
39
45
40
46
41
47
48
42
49
43
FRONT
12
14
15
19
20
26
27
28
40
41
DIP SWITCH SETTING #4 AND #5 ON
CONNECTOR
(CR-34500)
24
25
L2
L1
11
9
12
25
11
24
10
8
TOP
MAIN SWITCH
(SW-34375)
AIR TEMP PROBE
[PR-34494]
7
2
4
6
1
3
5
POWER T-BLOCK
(BK-3019)
L2
L1
12/3 CORDSET
(CD-3397)
WHITE
GREEN
BLACK
125 VOLTS, 50-60Hz
2300WATTS
18.4 AMPS
MODELS: 1000-BG2/128 W ELAN CONTROL
PH: 1
VOLTS: 125V
WATTS: 2300W
AMPS: 18.4A
ALTO-SHAAM
MENOMONEE FALLS, WISC. 53052-4501
BY: MP B
SCALE:
DWG: D-77003
APP'D: P.E.D
DATE: 6/21/07


DIP SWITCH SETTINGS #4 AND #5 ON
41
40
CONNECTOR [CR-34502]
16
CONTROL
(CC-34488)
38
44
39
45
40
46
HI-TEMP
HEATING CABLE
(CB-3045)
47
48
41
49
42
43
FRONT
12
14
15
19
20
26
27
28
CONNECTOR
(CR-34500)
24
25
AIR TEMP PROBE
[PR-34494]
L2
L1
TOP
MAIN SWITCH
(SW-34351)
11
9
10
8
208-240V, 50-60Hz
@208V= 1600W,7.6A
@240V=2100W,8.7A
7
2
4
6
1
3
5
POWER T-BLOCK
(BK-3019)
L2
L1
14/3 CORD SET
(CD-3551)
BROWN
GRN/YLW
BLUE
MODELS:1000-BQ2/128 ELAN CONTROLS
PH: 1
VOLTS: 208-240V
WATTS: MAX 2100W
AMPS: MAX 8.7A
ALTO-SHAAM
MENOMONEE FALLS, WISC. 53052-450
BY: MP B
SCALE:
DWG: D-77004
APP'D: P.E.D.
DATE: 6/21/07


DIP SWITCH SETTINGS #4 AND #5 ON
CONNECTOR [CR-34502]
HI-TEMP
HEATING CABLE
(CB-3045)
FRONT
CONTROL
(CC-34488)
CONNECTOR
[CR-34500]
AIR TEMP PROBE
[PR-34494]
L1
L2
TOP
MAIN SWITCH
(SW-34351)
POWER T-BLOCK
(BK-3019)
N
L1
TYPE HO7 RN-F
16/3 CORDSET
(CD-3922)
BROWN
GRN/YLW
BLUE
230V
50-60Hz
1950W
8.4A
MODELS: 1000-902/128 ELAN CONTROLS
PH: 1
VOLTS: 230V
WATTS: 1950W
AMPS: 8.4A
ALTO-SHAAM
MENOMONEE FALLS, WISC. 53052-4501
BY: MPB
SCALE:
DWG: D-77005
APP'D: PE D
DATE: 6/21/07


20 AMP INLET
(IT-3723)
30 AMP INLET
(IT-3306)
HI-TEMP
HEATING CABLE
(CB-3045)
3 HEATERS
500 WATTS
@ 125 VOLTS
EACH
TOGGLE
SWITCH
(SW-3617)
SENSOR
CONNECTOR
(CR-34500)
CONTROL
(CC-34488)
DIP SWITCH
SETTINGS
1 - OFF
2 - OFF
3 - OFF
4 - ON
5 - ON
6 - OFF
7 - OFF
8 - OFF
2 DUAL SPADE
CONNECTORS
REQUIRED
(CR-3849)
L.H. MAIN
POWER SWITCH
(SW-34375)
(ROCKER SWITCH)
R.H. MAIN
POWER SWITCH
(SW-34375)
(ROCKER SWITCH)
125V.A.C., 50-60Hz, 1ph
POWER SWITCH IN LOW POSITION
2000 Watts, 16.0 Amps
POWER SWITCH IN HIGH POSITION
3000 Watts, 24.0 Amps (max.)
MODELS: 1000-BQ/192 W ELAN CONTROL (125V)
PH: 1
VOLTS: 125V
WATTS: 3000 MAX
AMPS: 24 MAX
ALTO-SHAAM
MENOMONEE FALLS, WISC. 53052-450
BY: MPB
SCALE:
DWG: D-77006
APP'D: PED
DATE: 05/04/2007


MODELS: 1000-B9/192 (208-240V)
PH: 1
VOLTS: 208-240V
WATTS: MAX 3480W
AMPS: MAX 14.2A
ALTO-SHAAM
MENOMONEE FALLS, WISC. 53052-4904
BY: mpb
SCALE:
APP'D: P.E.D
DATE: 05/07/97
DWG: 7007
HI-TEMP HEATING CABLE (CB-3045) 2 HEATERS 750 WATTS @ 230 VOLTS EACH
HI-TEMP HEATING CABLE (CB-3045) 2 HEATERS 750 WATTS @ 230 VOLTS EACH
DIP SWITCH SETTINGS
1 - OFF
2 - OFF
3 - OFF
4 - ON
5 - ON
6 - OFF
7 - OFF
8 - OFF
CONTROL (CC-34488)
CONTROL (CC-34488)
CONNECTOR CR-34500
CONNECTOR CR-34500
SENSOR
SENSOR
POWER T-BLOCK (BK-3019)
14/3 CORD SET (CD-3551)
R.H. MAIN POWER SWITCH (SW-3435) (ROCKER SWITCH)
L.H. MAIN POWER SWITCH (SW-3435) (ROCKER SWITCH)
L1
L2


MODELS: 1000-BD/192 (230V)
PH: 1
VOLTS: 230V
WATTS: 3000W
AMPS: 13.0A
ALTO-SHAAM
MENOMONEE FALLS, WISC. 53051-4650
BY: MPB
SCALE:
APP'D: PED
DATE: 05/07/07
DWG: D-77008
HI-TEMP HEATING CABLE (CB-3045) 2 HEATERS 750 WATTS @ 230 VOLTS EACH
HI-TEMP HEATING CABLE (CB-3045) 2 HEATERS 750 WATTS @ 230 VOLTS EACH
DIP SWITCH SETTINGS
1 - OFF
2 - OFF
3 - OFF
4 - ON
5 - ON
6 - OFF
7 - OFF
8 - OFF
CONTROL (CC-34488)
CONTROL (CC-34488)
POWER T-BLOCK (BK-3019)
T-BLOCK (BK-33546)
T-BLOCK (BK-33546)
SENSOR
SENSOR
R.H. MAIN POWER SWITCH (SW-34351)
L.H. MAIN POWER SWITCH (SW-34351)
TYPE H07 RN-F 16/3 CORD SET (CD-3922)
L1
L2

TRANSPORTATION DAMAGE and CLAIMS

All Alto-Shaam equipment is sold F.O.B. shipping point, and when accepted by the carrier, such shipments become the property of the consignee.

Should damage occur in shipment, it is a matter between the carrier and the consignee. In such cases, the carrier is assumed to be responsible for the safe delivery of the merchandise, unless negligence can be established on the part of the shipper.

1. Make an immediate inspection while the equipment is still in the truck or immediately after it is moved to the receiving area. Do not wait until after the material is moved to a storage area.

2. Do not sign a delivery receipt or a freight bill until you have made a proper count and inspection of all merchandise received.

3. Note all damage to packages directly on the carrier's delivery receipt.

4. Make certain the driver signs this receipt. If he refuses to sign, make a notation of this refusal on the receipt.

5. If the driver refuses to allow inspection, write the following on the delivery receipt:
   Driver refuses to allow inspection of containers for visible damage.

6. Telephone the carrier's office immediately upon finding damage, and request an inspection. Mail a written confirmation of the time, date, and the person called.

7. Save any packages and packing material for further inspection by the carrier.

8. Promptly file a written claim with the carrier and attach copies of all supporting paperwork.

We will continue our policy of assisting our customers in collecting claims which have been properly filed and actively pursued. We cannot, however, file any damage claims for you, assume the responsibility of any claims, or accept deductions in payment for such claims.

ALTO-SHAAM LIMITED WARRANTY

Alto-Shaam, Inc. warrants to the original purchaser that any original part that is found to be defective in material or workmanship will, at Alto-Shaam's option, subject to provisions hereinafter stated, be replaced with a new or rebuilt part.

The labor warranty remains in effect one (1) year from installation or fifteen (15) months from the shipping date, whichever occurs first. Alto-Shaam will bear normal labor charges performed during standard business hours, and excluding overtime, holiday rates or any additional fees.

The parts warranty remains in effect for one (1) year from installation or fifteen (15) months from the shipping date, whichever occurs first.

However, the heating element on Halo Heat® cook/hold ovens and the refrigeration compressor on Alto-Shaam Quickchillers™ are warranted for a period of five (5) years from installation. The labor warranty is the same as stated above; namely, for one (1) year from installation or fifteen (15) months from the shipping date, whichever occurs first.

THIS WARRANTY DOES NOT APPLY TO:

1. Calibration.
2. Replacement of light bulbs and/or the replacement of display case glass due to damage of any kind.
3. Equipment damage caused by accident, shipping, improper installation or alteration.
4. Equipment used under conditions of abuse, misuse, carelessness or abnormal conditions including, but not limited to, equipment subjected to harsh or inappropriate chemicals including, but not limited to, compounds containing chloride or quaternary salts, poor water quality, or equipment with missing or altered serial numbers.
5. Damage incurred as a direct result of poor water quality, inadequate maintenance of steam generators and/or surfaces affected by water quality. Water quality and required maintenance of steam generating equipment is the responsibility of the owner/operator.
6. Damage caused by use of any cleaning agent other than Alto-Shaam's Combitherm® Cleaner including, but not limited to, damage due to chlorine or other harmful chemicals. Use of Alto-Shaam's Combitherm® Cleaner on Combitherm® ovens is highly recommended.
7. Any losses or damage resulting from malfunction, including loss of product or consequential or incidental damages of any kind.
8. Equipment modified in any manner from original model, substitution of parts other than factory authorized parts, removal of any parts including legs, or addition of any parts.

This warranty is exclusive and is in lieu of all other warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. In no event shall Alto-Shaam be liable for loss of use, loss of revenue or profit, or loss of product, or for any indirect or consequential damages. No person except an officer of Alto-Shaam, Inc. is authorized to modify this warranty or to incur on behalf of Alto-Shaam any other obligation or liability in connection with Alto-Shaam equipment.

ALTO-SHAAM, INC.

RECORD THE MODEL AND SERIAL NUMBER OF THE APPLIANCE FOR EASY REFERENCE.
ALWAYS REFER TO BOTH MODEL AND SERIAL NUMBER IN ANY CONTACT WITH ALTO-SHAAM REGARDING THIS APPLIANCE.

Model: _____ Date Installed: _____
Voltage: _____ Purchased From: _____
Serial Number: _____ _____

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